UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte HANS-ULRICH DEMUTH, TORSTEN HOFFMANN, KERSTIN KUHN-WACHE and FRED ROSCHE

Appeal No. 2005-0412
Application No. 09/682,968

ON BRIEF

Before SCHEINER, ADAMS, and MILLS, Administrative Patent Judges.

ADAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-5, which are all the claims pending in the application.

Claims 1 and 3 are illustrative of the subject matter on appeal and are reproduced below:

1. A method of raising the blood sugar level in a mammal having hypoglycemia by reducing degradation of glucagons, said method comprising administering to said mammal a therapeutically effective amount of an effector for reducing enzymatic activity of dipeptidyl peptidase (DP IV) and DP IV-analogous enzymes.

3. The method of claim 1, wherein the effector is selected from the group consisting of DP IV enzyme inhibitors, substrates of DP IV, pseudo-substrates of DP IV, inhibitors of DP IV expression,

proteins that bind DP IV or antibodies to DP IV and combinations thereof.

The reference relied upon by both appellants and the examiner is:

(Darnell) Molecular Cell Biology 59-66 (2nd ed., James Darnell et al. eds., Scientific American Books, 1990)

GROUNDS OF REJECTION

Claims 1-5 stand rejected under 35 U.S.C. § 112, first paragraph, as being based on an insufficient disclosure to support or enable the full scope of the claimed invention.

Claims 1-5 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite in the recitation of the term "effector".[1]

Claims 1-5 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,319,893.

We affirm the rejection of claims 1-5 under 35 U.S.C. § 112, second paragraph, and under the judicially created doctrine of obviousness-type double patenting. Having disposed of all claims on appeal we do not reach the merits of the rejection under 35 U.S.C. § 112, first paragraph.

---

[1] We recognize the examiner's comment (Answer, page 6) "that 'hypoglycemia' is misspelled." We find, however, no discussion of this in either the Brief, or the "Response to Argument" section of the Answer. However, upon review of the prosecution history, we note that the misspelling of "hypoglycemia" was corrected in a claim amendment dated October 9, 2002. Accordingly, it appears that the examiner's comment with regard to the misspelling of "hypoglycemia" is a typographical error.

DISCUSSION

We note that the examiner first raises the issue of whether the claimed invention is patentable pursuant to 35 U.S.C. § 112, first paragraph. However, we point out that the first inquiry should be whether the claims "set out and circumscribe a particular area with a reasonable degree of precision and particularity." In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). Since it is erroneous to analyze claims based on "speculation as to the meaning of terms employed and assumptions as to the scope of the claims" (In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962)), we begin by addressing the issues raised under § 112, second paragraph.

THE REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH:

As we understand appellants' claim grouping (Brief, page 2), claims 1, 2, 4 and 5 (Group I) stand or fall together, and claim 3 (Group II) stands or falls alone.[2] The examiner is unclear as to the meaning of the phrase "an effector for reducing enzymatic activity of DPIV and DPIV analogous enzymes" as it appears in appellants' claimed invention. Answer, page 6. More particularly, the issue is - what is an "effector" according to appellants' claimed invention. According to appellants (Brief, page 6), the term "effector" is a "definite term in the art." In support of this position appellants direct attention to page 63 of Darnell, wherein the term "effector" is defined as "[m]olecules that bind to enzymes and increase or decrease their activities." Therefore, based on the art-recognized definition of the term "effector," we understand that an "effector" according to appellants'

claimed invention binds to and reduces "the enzymatic activity of dipeptidyl peptidase (DP IV) and DP IV-analogous enzymes."

Claim 3:

As appellants correctly point out (Brief, page 7), claim 3 is drawn to a Markush group of "effectors." Also, as appellants correctly point out (id.), claim 3 lists, inter alia, "inhibitors of DP IV expression." There is no evidence on this record to demonstrate that a molecule that (1) inhibits the "expression" of a DP IV, or DP IV-analogous enzyme would also (2) "bind to" the enzyme and thereby reduce its enzymatic activity. Thus, there is no evidence on this record that a molecule that inhibits the "expression" of an enzyme would be considered an "effector," as the term is defined in the art.[3]

Therefore, we find the term "effector" as set forth in claim 3 to be indefinite. Accordingly, we affirm the rejection of claim 3 under 35 U.S.C. § 112, second paragraph.

Claim 1:

We limit our discussion to representative independent claim 1. Claims 2, 4 and 5 will stand or fall together with claim 1. In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991).

As discussed above, appellants assert (Brief, page 6), the term "effector" has a definite meaning in the art. Specifically, the term "effector" refers to "a

---

[2] We recognize appellants' separate argument of claim 3, as it appears on page 7 of the Brief.
[3] According to appellant (Brief, page 6), "[b]y italicization of 'effector,' ... [Darnell] defines 'effector' as a definite term in the art. The term effector means a molecule that binds to enzymes and either increases or decreases the[ir] enzymatic activity."

molecule that binds to enzymes and either increases or decreases the[ir] enzymatic activity." Id. Claim 3, however, depends from claim one and refers to a molecule that inhibits the expression of an enzyme as an effector. Since claim 3 depends from claim 1, it necessarily follows that the breadth of the term "effector" as it appears in claim 1 must also include inhibitors of DP IV expression.

Therefore, we find the term "effector" as set forth in claim 1 to be indefinite. Accordingly, we affirm the rejection of claim 1 under 35 U.S.C. § 112, second paragraph. As set forth above, claims 2, 4 and 5 fall together with claim 1.

THE OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION:

According to the examiner (Answer, page 7), "[c]laims 1-5 are rejected under the judicially created doctrine of [obviousness-type] double patenting over claims 1-4 of U.S. Patent No. 6,319,893...." Appellants did not dispute the merits of this rejection. Instead, appellants state (Brief, page 7), "upon notification of allowable subject matter, [appellants] will execute an acceptable terminal disclaimer to overcome this rejection."

Accordingly, we summarily affirm the rejection under the judicially created doctrine of obviousness-type double patenting.

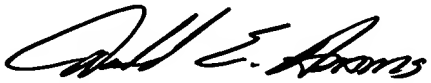
THE REJECTION UNDER 35 U.S.C. § 112, FIRST PARAGRAPH:

Having disposed of all claims on appeal, we do not reach the merits of the rejection under 35 U.S.C. § 112, first paragraph.

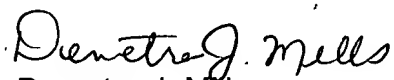
No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Toni R. Scheiner
Administrative Patent Judge



Donald E. Adams
Administrative Patent Judge



Demetra J. Mills
Administrative Patent Judge

) BOARD OF PATENT
) APPEALS AND
) INTERFERENCES

BROWN, RUDNICK, BERLACK & ISRAELS, LLP.
BOX IP, 18TH FLOOR
ONE FINANCIAL CENTER
BOSTON MA 02111